

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P271261

Luminaire Tested: **XNV-AF-01-LED-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271261
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24459)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV-AF-01-LED-U-T2R-7027
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5506.1 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

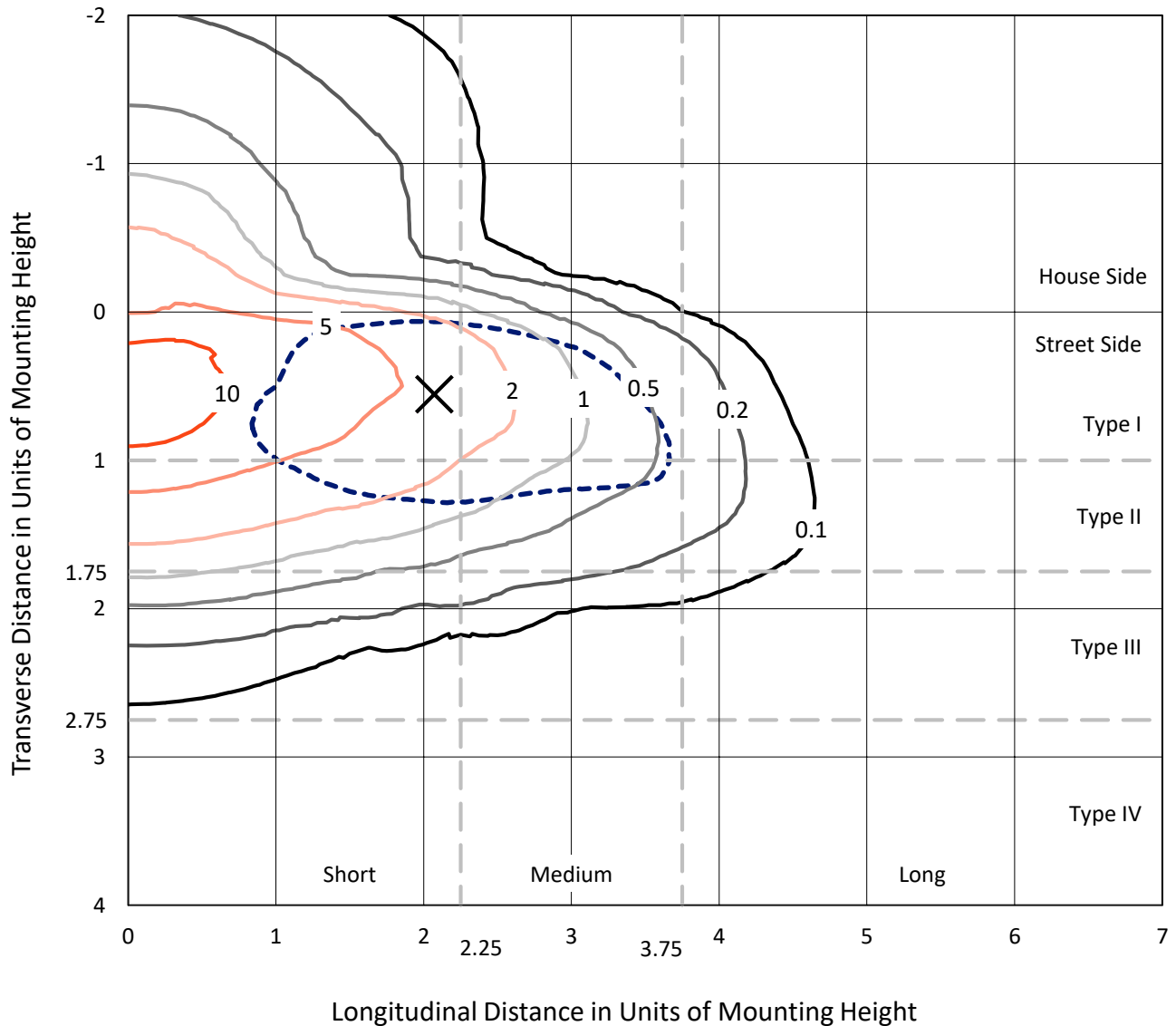
Input Watts (W): 58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P271261
 CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027

Iso-Footcandle Lines of Horizontal Illumination

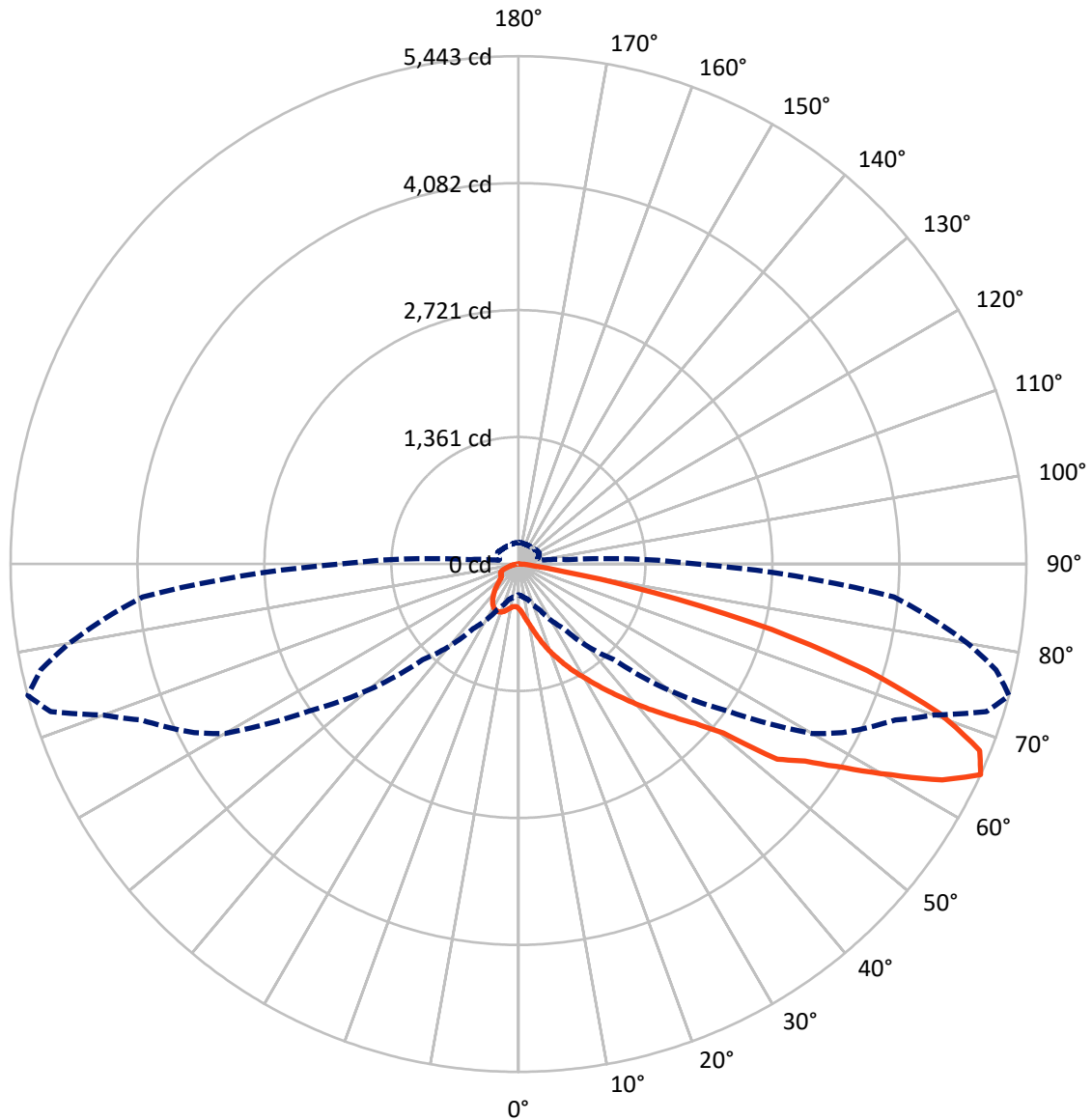
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.7 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P271261
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P271261

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	827.4	0.0	827.4
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	4678.7	0.0	4678.7
	% Fixture	85.0	0.0	85.0
Total	Lumens	5506.1	0.0	5506.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.3	1.0
10°-20°	215.1	3.9
20°-30°	434.1	7.9
30°-40°	737.3	13.4
40°-50°	1028.3	18.7
50°-60°	1260.3	22.9
60°-70°	1185.8	21.5
70°-80°	520.0	9.4
80°-90°	68.8	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5506.1	100.0
0°-180°	5506.1	100.0

Coefficient of Utilization



REPORT NUMBER: P271261

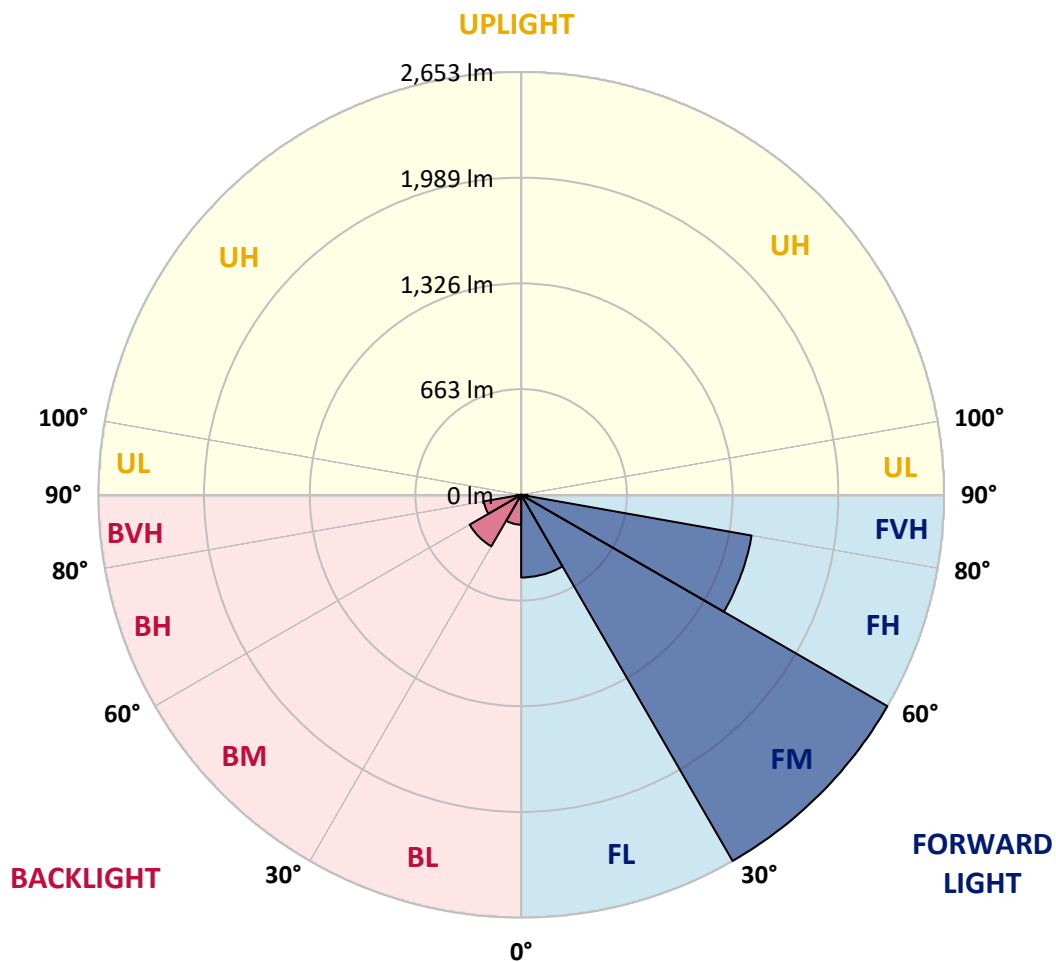
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	518.3	9.4			
FM (30°-60°)	2652.6	48.2			
FH (60°-80°)	1468.0	26.7			G1/1800
FVH (80°-90°)	39.9	0.7			G1/100
BL (0°-30°)	187.3	3.4	B1/500		
BM (30°-60°)	373.4	6.8	B1/1000		
BH (60°-80°)	237.8	4.3	B1/500		G1/500
BVH (80°-90°)	28.9	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





REPORT NUMBER: P271261

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	600.7	593.7	594.4	584.5	570.2	554.4	541.5	534.5	528.6	526.8	517.1
5°	785.7	776.9	773.8	751.3	717.7	677.9	638.2	622.7	610.2	602.5	583.5
7.5°	937.0	932.4	928.2	907.6	874.3	823.1	759.3	736.6	715.6	692.6	669.7
10°	1040.0	1038.3	1036.5	1022.1	994.5	950.0	881.2	856.4	830.2	800.7	770.9
12.5°	1117.8	1117.8	1119.1	1107.3	1090.5	1056.0	993.7	970.6	943.9	913.1	879.3
15°	1170.0	1171.3	1178.7	1182.2	1173.5	1151.4	1096.7	1076.3	1051.1	1020.7	987.1
17.5°	1204.5	1207.4	1218.2	1229.8	1241.0	1233.4	1192.7	1173.7	1151.0	1123.1	1091.4
20°	1285.1	1281.6	1282.1	1278.5	1294.9	1300.9	1278.5	1262.7	1244.5	1218.9	1190.3
22.5°	1454.4	1447.7	1430.6	1386.8	1366.9	1364.6	1351.3	1343.0	1329.0	1312.9	1284.0
25°	1675.0	1667.3	1633.3	1561.2	1501.5	1446.6	1422.0	1416.8	1407.7	1396.9	1376.3
27.5°	1903.0	1894.6	1850.9	1759.8	1681.9	1571.0	1494.6	1487.7	1479.1	1474.7	1464.9
30°	2103.7	2094.6	2051.5	1959.1	1865.2	1732.8	1592.3	1567.8	1553.4	1554.8	1549.2
32.5°	2279.9	2271.9	2223.6	2129.3	2034.0	1905.5	1719.1	1681.0	1648.7	1636.8	1641.1
35°	2427.7	2420.4	2367.6	2272.5	2176.7	2069.8	1882.4	1824.9	1772.4	1739.5	1735.5
37.5°	2514.6	2510.5	2473.3	2392.7	2297.4	2219.0	2065.3	2001.5	1924.0	1876.1	1855.0
40°	2509.8	2514.3	2508.0	2471.5	2397.7	2340.5	2255.7	2192.8	2117.0	2045.6	2002.9
42.5°	2438.2	2444.6	2472.9	2491.9	2471.9	2437.2	2422.1	2375.2	2307.2	2231.6	2172.5
45°	2340.2	2345.7	2382.6	2450.8	2508.0	2517.8	2567.8	2544.4	2487.0	2422.5	2357.3
47.5°	2189.9	2200.8	2243.4	2352.1	2487.9	2582.5	2690.1	2700.9	2667.6	2614.4	2553.5
50°	1972.4	1986.7	2046.7	2201.0	2412.3	2649.1	2871.9	2913.3	2899.9	2846.0	2784.2
52.5°	1749.5	1764.0	1843.9	2008.2	2290.4	2676.4	3050.9	3156.6	3233.0	3288.8	3299.6
55°	1517.7	1533.9	1621.4	1810.5	2127.9	2641.7	3178.7	3298.8	3376.3	3434.4	3457.8
57.5°	1256.1	1274.2	1359.0	1550.4	1898.1	2502.4	3320.9	3491.2	3606.3	3696.0	3746.6
60°	955.8	978.7	1066.6	1259.2	1596.2	2235.4	3384.4	3636.2	3819.4	3953.9	4033.7
62.5°	605.9	629.2	720.5	920.6	1252.5	1870.8	3205.1	3572.4	3884.9	4083.9	4230.3
65°	330.7	340.7	391.7	542.2	844.4	1451.5	2750.3	3183.7	3633.7	3915.7	4140.6
67.5°	248.0	249.4	254.7	291.4	449.7	980.1	2150.4	2547.1	3047.1	3409.8	3678.6
70°	217.2	217.2	217.8	218.2	244.1	531.0	1456.8	1822.1	2280.3	2647.3	2981.1
72.5°	194.8	192.6	192.0	187.7	191.2	272.1	793.1	1121.3	1507.5	1919.5	2230.9
75°	168.2	167.8	167.8	163.6	165.6	191.6	344.1	538.1	837.5	1221.1	1527.6
77.5°	145.3	142.9	143.3	140.9	147.4	146.8	163.2	221.7	364.6	641.3	895.6
80°	119.8	118.0	119.0	117.7	128.2	108.5	110.0	135.6	181.1	281.3	396.5
82.5°	88.7	89.3	95.9	95.3	107.8	73.2	80.6	101.1	121.9	140.1	152.4
85°	51.8	52.9	69.0	72.6	79.2	38.5	49.3	60.2	67.9	75.3	78.4
87.5°	5.6	7.4	38.5	39.5	35.4	11.6	19.9	25.2	26.9	28.7	25.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P271261

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027

CANDELA DISTRIBUTION (continued):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	513.8	509.2	504.4	501.7	496.8	492.5	484.7	478.4	471.5	466.6	464.5
5°	574.0	563.2	551.6	543.3	532.8	523.6	506.1	485.2	478.4	464.5	461.0
7.5°	652.6	632.9	613.4	597.3	579.0	564.0	534.5	496.8	491.8	469.4	464.5
10°	744.7	715.9	686.8	662.1	635.5	612.3	568.8	515.5	510.3	481.6	476.7
12.5°	847.7	812.6	775.1	738.0	706.4	673.9	614.7	545.0	536.6	502.6	496.0
15°	953.8	915.9	872.6	827.7	788.8	745.8	671.2	583.5	568.2	528.3	519.1
17.5°	1058.6	1017.5	972.0	921.9	876.3	825.0	732.1	626.7	600.0	553.4	541.9
20°	1159.7	1118.1	1070.2	1021.1	964.3	905.4	794.5	669.0	628.4	574.5	559.4
22.5°	1251.9	1216.1	1168.2	1111.7	1054.3	988.1	857.8	711.4	653.2	590.5	571.3
25°	1348.8	1316.3	1268.6	1214.4	1147.5	1074.0	923.3	751.7	673.2	599.3	575.5
27.5°	1447.0	1419.0	1374.0	1317.0	1245.2	1163.7	989.8	788.8	689.3	602.1	573.4
30°	1551.7	1530.1	1488.6	1424.9	1352.4	1261.9	1062.3	825.3	699.5	598.4	564.0
32.5°	1650.8	1650.1	1613.4	1547.2	1469.1	1369.6	1138.7	862.1	704.7	587.4	547.4
35°	1753.9	1768.1	1740.5	1677.5	1595.1	1484.8	1223.1	901.3	705.1	568.2	526.0
37.5°	1870.8	1896.4	1884.1	1824.2	1737.7	1616.1	1322.2	945.3	703.1	541.5	495.0
40°	2003.8	2039.0	2038.6	1988.2	1895.7	1763.3	1437.5	994.8	698.2	508.3	458.1
42.5°	2156.3	2198.0	2209.6	2159.7	2066.2	1924.0	1569.6	1049.1	690.3	475.4	419.2
45°	2330.7	2367.6	2389.2	2343.0	2249.0	2099.2	1721.2	1110.8	680.9	433.0	374.9
47.5°	2517.4	2560.1	2592.7	2553.2	2452.9	2298.9	1901.0	1190.3	677.4	384.7	326.9
50°	2749.0	2793.1	2863.4	2845.7	2790.7	2666.6	2280.9	1378.0	678.8	338.8	286.5
52.5°	3323.4	3424.6	3513.6	3473.9	3343.3	3130.8	2590.0	1482.4	649.5	301.2	258.5
55°	3496.7	3611.6	3743.0	3726.6	3601.1	3386.8	2834.1	1569.6	621.1	274.0	240.2
57.5°	3800.1	3935.7	4119.2	4115.8	3962.0	3720.6	3148.2	1673.9	608.8	258.2	231.1
60°	4121.3	4294.0	4547.6	4587.1	4420.1	4168.9	3519.5	1802.2	610.5	249.4	226.0
62.5°	4356.1	4609.3	4978.0	5096.4	4899.6	4622.9	3904.8	1930.4	600.0	239.2	219.6
65°	4370.3	4735.0	5258.3	5442.6	5243.2	4887.7	4040.8	1905.1	536.9	225.6	209.5
67.5°	4020.1	4495.1	5130.8	5332.9	5129.1	4724.5	3802.5	1665.5	436.4	201.8	192.0
70°	3348.3	3899.6	4559.4	4784.7	4616.2	4206.8	3309.4	1330.3	326.2	170.1	165.6
72.5°	2587.5	3101.7	3700.9	3909.5	3780.4	3420.3	2610.3	969.5	232.9	138.0	134.4
75°	1849.8	2287.7	2722.7	2802.2	2675.1	2344.3	1693.6	605.5	163.2	113.1	108.2
77.5°	1145.3	1430.1	1586.3	1484.1	1321.9	1098.7	689.3	299.1	108.5	92.2	87.2
80°	508.3	596.6	556.9	496.4	392.0	322.2	210.6	132.8	70.1	71.1	68.4
82.5°	170.9	180.7	175.9	174.8	157.7	138.0	89.3	57.4	39.3	45.5	44.5
85°	83.4	87.2	87.6	90.6	78.8	61.4	24.2	22.7	16.8	24.6	25.6
87.5°	25.2	25.6	23.1	25.2	20.3	14.1	4.5	6.3	3.1	6.0	6.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P271261

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027

CANDELA DISTRIBUTION (continued):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	460.7	459.3	456.8	454.0	453.3	449.7	448.8	446.9	445.9	444.1	442.8
5°	456.3	454.0	451.2	448.1	448.1	443.1	441.0	438.9	438.9	435.8	434.3
7.5°	460.7	457.4	454.4	451.5	452.6	446.9	444.8	442.8	442.3	439.2	437.8
10°	472.5	469.4	465.5	462.6	461.6	457.1	454.6	451.5	449.4	447.3	445.2
12.5°	490.7	486.5	481.6	475.7	473.1	469.4	465.5	461.3	456.3	454.4	451.2
15°	512.5	505.4	498.7	491.5	484.7	481.0	475.7	469.0	462.4	459.6	455.4
17.5°	530.3	523.0	513.6	504.8	492.8	489.7	482.3	474.2	463.4	462.4	456.1
20°	545.5	534.1	522.6	512.2	493.9	492.1	483.0	473.5	458.1	458.1	450.4
22.5°	553.7	538.4	524.7	510.6	487.9	486.5	476.0	464.9	445.9	446.5	437.1
25°	555.2	536.6	519.5	502.6	476.5	473.9	460.7	448.3	427.8	426.2	416.5
27.5°	549.6	527.8	507.9	487.6	459.3	454.0	439.2	424.4	404.1	400.7	390.3
30°	536.6	511.0	488.6	465.1	435.4	427.0	411.6	396.5	375.9	371.3	361.5
32.5°	515.9	486.9	462.0	438.6	405.7	395.2	379.8	364.6	344.7	341.1	332.1
35°	488.6	456.1	429.7	405.0	372.0	361.1	346.4	333.1	314.9	313.5	307.2
37.5°	454.4	420.3	392.3	368.5	337.4	331.7	316.7	306.9	291.8	293.1	290.1
40°	415.5	380.7	354.1	333.1	306.1	301.2	292.0	284.8	271.7	275.7	276.0
42.5°	376.2	341.5	317.3	298.4	275.3	272.1	265.9	261.6	251.9	259.5	262.8
45°	331.7	299.4	278.8	264.5	247.4	247.4	244.1	243.8	237.2	248.0	251.2
47.5°	288.6	263.5	249.0	240.2	228.3	234.0	232.9	235.7	230.9	242.1	244.9
50°	256.0	238.5	229.7	225.6	217.2	226.0	228.0	231.9	227.7	237.5	239.6
52.5°	235.4	223.8	218.9	217.8	211.9	222.8	226.3	229.7	224.8	234.0	233.6
55°	223.8	216.1	214.3	216.5	211.9	222.4	226.0	228.3	224.1	230.4	230.1
57.5°	219.6	215.5	216.5	219.6	216.5	225.2	227.0	229.7	225.6	228.3	229.7
60°	219.2	219.2	223.5	227.7	225.6	231.9	232.9	232.7	228.7	229.1	229.7
62.5°	217.2	222.4	229.4	236.1	235.4	243.1	243.8	239.2	236.1	232.7	231.6
65°	210.6	219.2	229.4	238.5	239.9	251.9	253.2	248.7	246.6	240.7	236.1
67.5°	195.8	207.0	218.9	230.1	232.7	248.7	251.9	253.6	254.7	250.7	244.9
70°	170.9	182.4	194.8	207.7	211.2	229.1	235.7	243.8	250.1	255.7	253.6
72.5°	139.1	149.6	160.1	171.9	177.2	195.8	204.5	218.6	228.3	242.7	248.7
75°	110.3	116.6	123.0	130.3	134.4	152.7	163.6	180.4	193.8	213.6	227.0
77.5°	86.9	90.0	93.2	96.3	98.1	108.2	117.0	133.8	149.2	174.5	194.0
80°	67.0	68.6	69.0	70.1	69.3	74.3	77.4	87.6	100.9	125.8	148.8
82.5°	43.1	44.5	45.2	46.9	43.5	49.8	51.8	52.9	59.8	78.2	94.6
85°	24.2	24.6	24.9	25.6	20.8	26.9	27.3	25.6	24.9	32.2	36.4
87.5°	6.0	5.6	6.0	6.0	2.4	5.6	5.6	3.9	2.9	5.3	4.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P271261

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	439.6	438.9	439.2	437.5	436.8	437.1
5°	432.5	431.1	431.1	430.2	428.8	428.8
7.5°	435.8	433.0	431.8	429.7	427.8	428.0
10°	440.7	435.8	432.3	429.1	426.6	426.6
12.5°	443.9	435.0	429.7	425.5	422.8	422.8
15°	444.5	431.1	423.6	418.9	416.2	416.2
17.5°	440.3	423.6	413.7	407.7	404.5	405.2
20°	429.7	409.1	397.6	391.2	388.1	388.4
22.5°	413.3	389.5	376.2	368.8	365.7	365.7
25°	390.9	365.0	350.6	344.7	341.9	341.9
27.5°	365.3	338.8	326.2	321.6	319.7	319.7
30°	336.7	314.5	305.5	302.3	299.4	299.4
32.5°	312.4	296.7	293.6	289.3	282.0	281.6
35°	293.1	291.4	289.0	276.4	265.9	264.5
37.5°	282.6	293.1	277.8	256.0	247.7	247.4
40°	277.0	286.9	260.2	249.8	248.7	248.7
42.5°	263.7	270.7	259.3	253.2	253.2	253.6
45°	249.8	255.7	261.6	256.3	258.2	258.5
47.5°	239.9	251.9	261.6	257.2	260.6	262.8
50°	230.9	248.3	256.3	256.3	260.2	260.6
52.5°	228.7	243.4	251.4	255.4	255.7	254.0
55°	229.1	239.6	247.7	252.6	250.4	250.4
57.5°	228.7	237.5	244.5	246.2	247.4	247.4
60°	229.1	234.6	240.2	239.6	243.1	243.1
62.5°	230.1	230.9	233.6	232.9	238.2	238.2
65°	232.7	226.0	224.1	224.8	231.1	230.9
67.5°	237.2	219.2	213.6	214.1	223.0	221.7
70°	243.8	210.2	201.8	199.7	215.1	212.5
72.5°	245.9	199.7	186.4	184.2	193.3	186.4
75°	236.1	191.2	169.9	162.9	159.0	156.9
77.5°	210.6	185.9	152.7	138.0	132.1	130.7
80°	174.5	175.1	130.3	112.7	131.1	130.7
82.5°	131.7	151.4	104.5	97.7	95.0	79.2
85°	63.8	113.8	80.2	67.3	40.2	38.2
87.5°	5.6	47.6	46.3	30.2	13.7	12.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)